The State of Cloud Adoption in US Federal Government – Hope, Hype, and Realities

Katell Thielemann
Research VP
The Great Federal Government Balancing Act

SPA: By 2019, over 30% of technology providers' new software investments will shift from cloud-first to cloud-only.

Cloud platforms solidify value today and act as accelerants towards the future.

<table>
<thead>
<tr>
<th>Regulations</th>
<th>Security</th>
<th>Data Sovereignty</th>
<th>Procurement Policies</th>
<th>Features</th>
<th>Cost</th>
</tr>
</thead>
</table>
The Federal Cloud Inflection Point is Finally Here

- OPM breach post-mortems
- $503M Salesforce BPA; $50M investment fund
- AWS and MS Azure double down on GovCloud Investments
- Agile acquisition training, Procurement Innovation Labs
- FedRAMP Tailored, Connect, etc.
- Shared Services push
- DISA MIlCloud 2.0
- DepSecDef Cloud Acceleration Memo - JEDI

Rapidly Growing Adoption:
Cloud Demystified, Obstacles Removed


- FedRAMP FISMA High baseline
- DoD Cloud Computing Strategy
- Federal Data Center Consolidation Initiative
- GSA IaaS BPA
- Federal CIO's 25-Point Plan
- GSA Emiaas BPA
- NIST Cloud Computing Reference Architecture
- FedRAMP Policy Memo
- FedRAMP draft FISMA High baseline
- GSA Salesforce SaaS BPA
- CIGIE Cloud Computing Initiative
- GAO Cloud Computing Report
- DoD Cloud Way Forward Report
- DoD Updated Guidance on the Acquisition and Use of Commercial Cloud Computing Services
- FedRAMP Forward
### 2018 Gartner CIO Survey

#### Technologies Most Crucial to Achieving Agencies’ Missions

<table>
<thead>
<tr>
<th>Rank</th>
<th>U.S. Federal (n = 55)</th>
<th>Total (n = 2, 834)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cloud services/solutions</td>
<td>35%</td>
</tr>
<tr>
<td>2</td>
<td>BI/analytics</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>Infrastructure/data center</td>
<td>11%</td>
</tr>
<tr>
<td>4</td>
<td>Mobility/mobile applications</td>
<td>9%</td>
</tr>
<tr>
<td>5</td>
<td>Networking, voice and data communications</td>
<td>7%</td>
</tr>
<tr>
<td>6</td>
<td>Virtualization</td>
<td>7%</td>
</tr>
<tr>
<td>7</td>
<td>Security and risk</td>
<td>5%</td>
</tr>
<tr>
<td>8</td>
<td>Industry specific solutions</td>
<td>4%</td>
</tr>
<tr>
<td>9</td>
<td>Internet of things</td>
<td>4%</td>
</tr>
<tr>
<td>10</td>
<td>Integration/interoperability</td>
<td>4%</td>
</tr>
</tbody>
</table>

Percentage of respondents

Base: All answering, excludes DK, n varies by segment
Showing the 10 most common answers per segment, coded-open text responses
Which technology area do you think is most important to helping your business differentiate and win? Is most crucial to achieving your organization’s mission?

ID: 123456

© 2017 Gartner, Inc.
## 2018 Gartner CIO Survey

### Top Technology Areas Attracting Spending or Suffering Cuts

<table>
<thead>
<tr>
<th>Rank</th>
<th>Top 10 Areas Attracting New Spending</th>
<th>U.S. Federal (n = 53)</th>
<th>Top 10 Areas Suffering Spending Cuts</th>
<th>Rank</th>
<th>U.S. Federal (n = 48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cloud services/solutions</td>
<td>28%</td>
<td>1 Infrastrucure and data center</td>
<td>1</td>
<td>29%</td>
</tr>
<tr>
<td>2</td>
<td>Cybersecurity/information security</td>
<td>23%</td>
<td>2 Legacy systems</td>
<td>2</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>BI/analytics</td>
<td>17%</td>
<td>3 Hosting services/server</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td>4</td>
<td>Infrastructure and data center</td>
<td>13%</td>
<td>4 People/talent management</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>5</td>
<td>Virtualization</td>
<td>8%</td>
<td>5 None</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>6</td>
<td>Networking, voice and data communications</td>
<td>6%</td>
<td>6 Cloud services/solutions</td>
<td>6</td>
<td>4%</td>
</tr>
<tr>
<td>7</td>
<td>Legacy modernization</td>
<td>6%</td>
<td>7 Software development or upgrades</td>
<td>7</td>
<td>4%</td>
</tr>
<tr>
<td>8</td>
<td>System/process automation</td>
<td>6%</td>
<td>8 Desktop refresh/upgrade</td>
<td>8</td>
<td>4%</td>
</tr>
<tr>
<td>9</td>
<td>Data management</td>
<td>6%</td>
<td>9 Contact center</td>
<td>9</td>
<td>4%</td>
</tr>
<tr>
<td>10</td>
<td>Mobility and mobility applications</td>
<td>4%</td>
<td>10 Communication/connectivity</td>
<td>10</td>
<td>4%</td>
</tr>
</tbody>
</table>

### Percentage of Respondents

Base: All answering, excludes don’t know; number of respondents varies by segment.
Showing the 10 most common answers per segment, coded open-text responses.
What are the technology areas where organization will be spending the highest amount of new or additional funding in 2018?
What are the technology areas where your organization will be reducing funding by the highest amount in 2018 compared to 2017?
ID: 341393 © 2018 Gartner, Inc.
2018 “Top of Mind” Topics
Cloud Strategy ≠ “The Boss Said So”

- Too few leaders understand what “Cloud” really means
- Not everything can or should move to Cloud environments
- Which “cloud” and “how cloudy”?
  - five essential characteristics
  - three service models
  - four deployment models
- Strategy is hard; Execution is harder
  - Mission outcomes, the only True North
Security OF the Cloud ≠ Security IN the Cloud

- FedRAMP maturing, but … Configuration errors? Data governance?
- Shared responsibility models different in IaaS, PaaS, SaaS
- TIC and CAP challenges
- New tools/services continually emerging
  - AWS buys Sqrrl
  - Cloud Access Security Brokers (CASB) enter federal space
- Cloud challenges traditional perimeter security thinking
- Focus should be on all facets of Risk
How much $ Will I Save?

- Mission outcomes often > cost savings
- While compute and storage is cheap, migration, maintenance and upgrade services can be costly
- Elasticity cuts both ways
  - Usage increases => Costs increase
- New procurement paradigms are needed
- Governance and tight spend management is key
Convergence in GovClouds BUT The Future will be Hybrid

Conscious trade-offs are key
- Specialization versus breadth, depth, innovation

FedRAMP list keeps growing

Explosion of Ecosystem Vendors
- SaaS Marketplaces + Services: Cloud Migration, Disaster recovery, Application Management and Support, Consulting, Brokerage/multi cloud management, Managed Services offerings, Network, Security, Governance

Small business goals aren’t going away

Every Cloud move MUST include an Exit Strategy
Why Do I Get the Feeling this is Bigger than Technology?

- It’s a different way of THINKING
- It’s a different BUSINESS MODEL
- Culture remains the biggest issue
  - From Command and control to Agility and Innovation
  - From Serial Requirements Development to Iterative Prototyping
  - Continuing debate between centralization and mission effectiveness
- Acute talent gap continues
- Beware the Walking Dead - in Agencies … and Industry!
The Way Ahead – Alignment Helps with Momentum

**Legislative**
- DATA Act (financial transparency)
- FITARA (CIO role)
- MEGABYTE (Software)
- PMIAA (Project Management)
- NDAA
  - Changes in DoD Roles
  - New Procurement Mandates
- MGT Act (IT Modernization)
  - Plans already developed

**Executive**
- WH Office of American Innovation & American Technology Council
- OMB Reorganization Memo
  - Cybersecurity Executive Order
- IT Modernization Report
- DepSecDef Cloud Acceleration Memo
- 2019 Budget requests
- New Federal CIO/GSA Partnership/MGT Act implementation

New Mindset: Modernization Presents Risks, but Failure to Modernize Presents Much Bigger Risks – get moving!
Q&A